



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

52

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,952	01/20/2004	Reuven Wachtfogel	7251/91334	1453

24628 7590 03/16/2005

WELSH & KATZ, LTD
120 S RIVERSIDE PLAZA
22ND FLOOR
CHICAGO, IL 60606

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
----------	--------------

2134

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,952

Applicant(s)

WACHTFOGEL ET AL.

Examiner

Andrew L Nalven

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are pending.

Claim Objections

2. Claim 8 is objected to because of the following informalities: Claim 8 contains the limitation "which one key period" in the final line, Examiner believes this to be a typo and has interpreted the claim to read "where on key." Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6-8, 11-13, and 16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gillon et al US PGPub 2003/0035543. Gillon discloses a system and method for conditional access key encryption.

Art Unit: 2134

5. With regards to claims 1, 18, and 20, Gillon teaches identifying a plurality of frames to be descrambled (Gillon, Page 5, Paragraph 0058), for each frame of the plurality of frames, identifying a key period associated with a key for descrambling the frame (Gillon, Page 5, Paragraph 0059, key changes must be synchronized), and for at least one frame f of the plurality of frames substituting a substitute frame g for the frame f (Gillon, Page 6 Paragraph 0073, current frame substituted for successive frames until new key can be generated and then system jumps to next frame).
6. With regards to claims 2-3 and 12-13, Gillon teaches the producing of one key for each key period (Gillon, Page 6 Paragraph 0071, decryption key associated with one point in time).
7. With regards to claims 6-7 and 16-17, Gillon teaches rendering all of the plurality of frames (Gillon, Figure 3 Item 135, Page 5 Paragraph 0059).
8. With regards to claim 8, Gillon teaches determining a number NK of key periods to be skipped for each key period to be descrambled, NK being greater than or equal to one (Gillon, Page 6 Paragraph 0070), determining a plurality of groups of key periods, each group including one key period to be descrambled and NK key periods to be skipped (Gillon, Page 6 Paragraph 0071), determining a number N of frames to be provided from each group of the plurality of groups of key periods (Gillon, Page 6 Paragraph 0073), and for each one group of the plurality of groups of key periods, choosing N frames to be provided from within the one key period to be descrambled, which one key period is comprised in the one group (Gillon, Page 6 Paragraph 0073).

Art Unit: 2134

9. With regards to claims 11, 19 and 21, Gillon teaches all that is described above in relation to claim 1, and further teaches the substituting being based in part on the distance between frame f and g (Gillon, Page 6 Paragraphs 0073 and 0069, if jumping too many frames, too great a distance, must substitute).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillon US PGPub 2003/0035543.

12. With regards to claim 9, Gillon fails specifically teach N being greater than or equal to 2. Gillon does teach that as many frames as possible will be decrypted and rendered (Gillon, Page 6 Paragraphs 0073, 0071, 0070). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to display $N > 2$ frames per period because the more frames rendered the higher the quality of the displayed video.

13. With regards to claim 10, Gillon teaches the N frames evenly spaced with the key periods (Gillon, Page 6 Paragraph 0070, ½ second).

14. Claims 4-5 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillon US PGPub 2003/0035543 in view of Unger US PGPub 2004/0062398.

15. With regards to claims 4-5 and 14-15, Gillon fails to teach the producing of a key from an ECM. Unger teaches the producing of a key from an ECM (Unger, Page 3 Paragraph 0034). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Unger's method of using ECM's with Gillon's conditional access system because it offers the advantage of facilitating timely encryption by providing a key before an encrypted stream of packets is received (Unger, Page 1 Paragraph 0005).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Vince US PGPub 2003/0228018 teaches a system for seamless switching between multiple pre-encrypted video files.

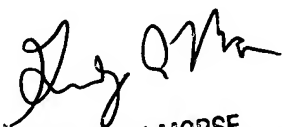
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

Art Unit: 2134

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100